

FIGURE 1

bitterbush [SIN_2]	MEEPK-----KHSQADLAHKQPGDLWISIKGKVYDISKW
soybean [SIN_8]	M-----EVVEKEK-----KYITSEELKGHNKEGDLWISIQGKVYNVSDW
borage [gi_2062403]	MA-----A-----QIK-----KYITSDELKNHDKPGDLWISIQGKAYDVS DW
corn [SIN_4]	MP-----PSVDAMPAPGDAAGAGDVRMISSKELRAHASADDLWISISGDVYDVT PW
wheat [SIN_10]	MARTGLADATAPADEAMPAASK--DAADV RMISTKELQAHAAAADDLWISISGDVYDVT PW
wheat [gi_4104056]	MARTGLADATAPADEAMPAASK--DAADV RMISTKELQAHAAAADDLWISISGDVYDVT PW
soybean [SIN_6]	LP-----A-----SPSIEVLNSIADGK-----KYITSKELKKHNNPNDLWISILGKVYNVTEW
sunflower [gi_1040729]	
bitterbush [SIN_2]	TKEHPGGELPLLSFAGQDVTDAFIAYHPPGTAWQYLDRFFTGYYYQDYSVSEMSK DYRRLV
soybean [SIN_8]	VKEHPGGDVPISNLAGQDVTDAFIAYHPPGTAWSHLEKEFFTGYHLSDFKVSEVSKD YRKLA
borage [gi_2062403]	VKDHPGGSFPLKSIAGQEVTDAFVAEHPASTWKNLDKFTGTYYLKDYSVSEVSKD YRKLV
corn [SIN_4]	LPHHPGGDLPLLTLAGQDATDAFAAYHPPSARPLLRFFVG-RLSDYAVSPASADYRRL L
wheat [SIN_10]	LRHHPGGEVPLITLAGQDATDAFMAYHPPSVRPLLRRFFVG-RLSDTVPPASADFRLL
wheat [gi_4104056]	LRHHPGGEVPLITLAGQDATDAFMAYHPPSVRPLLRRFFVG-RLTDYTVP PASADFRLL
soybean [SIN_6]	FSTSHRLSDHTVSAASSDYRKLF
sunflower [gi_1040729]	AKEHPGGDAPLINLAGQDVTDAFIAFHPPGTAWKHLDKLFTGYHLKDYQVS DISRDYRKLA
bitterbush [SIN_2]	SEFSKMGLEKTPGKGVYCSIFFVSVLFA LSVGVLICKSTWAHLCSGLLMGMLWLQSGWV
soybean [SIN_8]	SEFSKLGFLDTKGHVTSTCLASVAVMFLIVLYGVLRCTSVWAHLGS GMLLGLLWMQSAYV
borage [gi_2062403]	EEFSKMGLYDKKGHIMFATLCFIAMILFAMS VYGVLFCEGVLVHLFGFLWIQS GWI
corn [SIN_4]	AQLSSAGLFERVGHTPKFLLVAMSVLFCIALYCVLACSTS TGAHM FAGGLIGF IWIQS GWM
wheat [SIN_10]	AQLSSAGLFERVGHTPKFLLVAMSVLFCIALYCVLACSTS TGAHM FAGGLIGF IWIQS GWI
wheat [gi_4104056]	AQLSSAGLFERVGHTPKFLLVAMSVLFCIALYCVLACSTS TGAHM FAGGLIGF IWIQS GWI
soybean [SIN_6]	SDLSALNLFNRKGHTTSILLSLITLFP LSVCGVLFSDSTF VHVL SAA LIGF LWIQS GWI
sunflower [gi_1040729]	SEFAKAGMFEKKGHGVIYSLCFVSLLLSACVYGVLYSGSF WIHMLS GAILGLA WMQIAYL

FIGURE 1

bitterbush [SIN_2]
 soybean [SIN_8]
 borage [gi_2062403]
 corn [SIN_4]
 wheat [SIN_10]
 wheat [gi_4104056]
 soybean [SIN_6]
 sunflower [gi_1040729]

GHDSCHYQVMPNRKLNRLFQLIAGNVIAGVSVAWWKLDHINTHHFACNSANLDPPDIQHLPI
 GHDSGHYVUMTTNGFNKVAQILSGNCNLTGISIAWWKWTNAHHIACNSLDDHDPLQHMPV
 GHDAUGHYMWVSDSRNLKFMGIFAANCNSLDSRNLKFMGIFAANCNSLEYDPLQYIPF
 GHDSGHHRITGHPVLDRVQVLSGNCLTGSIACNSLDDHDPLQHMPV
 GHDSGHHQITRHPALNRLLQVSGNCLTGGLGIAWWKENHNTHHISCNSSLDDHDPLQHLP
 GHDSGHHQITRHPALNRLLQVSGNCLTGGLGIAWWKENHNTHHISCNSSLDDHDPLQHLP
 GHDSGHYNVMLSRRRNRAIQILSGNILAGISIGWWKWNNAHHIACNSLDYDPLQHMPV
 GHDAHYQMMATRGWNKFAGIFIGNCITGISIAWWKWTNAHHIACNSLDYDPLQHLP

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I AISPKFENSLSITYHNCKMTYDRAARFFVFSFOHQWTEYPALLSVRVLFLISFKVVVFNN
 FAVSSRFENSITSFHFYGRKLEFDIARFLICYQHFTFYPVMCVARVNLYLQTILLFSR-
 LVVSSKEFGSLTSHSFYEKRLTEDLSRFFVSYQHWTYPIMCAARLNMYVQSLIMLTK-
 FAVSPKLEGNIWSYFYQRTLAFFDAASKFFISYQHWTYPVMCIARINLLAQSAFLVLT-
 FAVSTKLFFNLWSVCYERTLAFFDAISKFFVSYQHWTYPVMGFAIRINLLVQSIVFLITQ-
 FAVSTKLFFNLWSVCYERTLAFFDAISKFFVSYQHWTYPVMGFAIRINLLVQSIVFLITQ-
 FAVSSRFENSITSFHXYGRKXEFDXIAXFPLICYQHFTFYPVMCVARVNLYLQTILLFSR-
 I AVSSKLFENSITSVFFYGRQLTFDPLARFFVSYQHLYYPIMCVARVNLYLQTILLISK-

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KRVYKRSEOEILGYAAFLLTWYLLLSPRLPNPERVMFVLASFAVCSIQHIQFCCLNHFAANV
 RKVQDRALNIMGILFWTWFPLVSCLPNWPERVMFVLASFVTCGQVQFCCLNHFAANV
 RNVSYRAHELLGCLVESIWYPLVSCLPNWGERIMEVIASLSVTGMQQVQFCCLNHFSSSV
 KRPVQRLLIEIAGVATEFWAWYPLLVASILPNWWERVAFVLFSFTICGIOQHVQFCCLNHFSSDV
 KKVRQRWLEIAGVAAFWWWYPLVSCLPNWWERVAFVLASFVITGIOQHVQFCCLNHFSSAV
 KKVRQRWLEIAGVAAFWWWYPLVSCLPNWWERVAFVLASFVITGIOQHVQFCCLNHFSSAV
 XKVQDRALNIMGILFWTWFPLLLA-----LLFV-----PIQHIQFWLNHLAENL
 RKIPDRGLNILGTLIFWTWFPLVSRLPNWPERVAFVLVSFCVTFGQIQTLNHFSGDV

FIGURE 1

bitterbush [SIN_2]	YTGLPSSGNDFHQQTGTLNITASAWWDWFHGGLFQIEHHLPRMPKCHFRKISPIVNK
soybean [SIN_8]	YVGPPSGNDWFEEKQTSGLDISCASSMDWFEGGLQFQLEHHLFPRLPRCQLRKISPLVSD
borage [gi_2062403]	YVGKPKGNNWEEKQTDTLDISCCPMDWFHGGLQFQIEHHLFPKMPCRNLRKISPYVIE
corn [SIN_4]	YVGPPKGNDWEEKQTAGTLDILCSPWMDFHGGLQFQIEHHLFPRLPRCHLRKVAPAVRD
wheat [SIN_10]	YVGPPKGNDWFEEFRQTAGTLDIKCSPWMDFHGGLQFQVEHHLFPRLPRCHYRMVAPIVRD
wheat [gi_4104056]	YVGPPKGNDWFERQTAGTLDIKCSPWMDFHGGLQFOVEHHLFPRLPRCHYRMVAPIVRD
soybean [SIN_6]	YXG-----
sunflower [gi_1040729]	YVGPPKGDNWEEKQTRGTIDIACSSWMDWFEGGLQFQLEHHLFPRLPRCHLRSISPICRE

bitterbush [SIN_2]	LCQKHNLSYETATMWEANKMVYSTLRAVAMEAKDVTK-PVPKNMWEMAMNTFG
soybean [SIN_8]	LCKKHNLPYRSLSEWEANQWTIRTLRTAALQARDLTN-PAPKNLWEAVNTHG
borage [gi_2062403]	LCKKHNLQSKANEMTLRLRNTALQARDITK-PLPKNLVWEALHTHG
corn [SIN_4]	LCKKHGLTYSAAATEGANVLTWKTLLRAAALQARTATSGGAPKNLWEALNTHG
wheat [SIN_10]	LCKKHGLSYGAATEWEANVMTWKTLLRAAALQAREATTGAAPKNLWEALNTHG
wheat [gi_4104056]	LCKKHGLSYGAATEWEANVMTWKTLLRAAALQAREATTGAAPKNLWEALNTHG
soybean [SIN_6]	-----
sunflower [gi_1040729]	LCKKYNLPYVSLSFYDANVTLKTLRTAALQARDLTN-PAPONLWEAFNTHG